STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 7604

Petition of Vermont Electric Cooperative, Inc., for a)	
certificate of public good, pursuant to 30 V.S.A. § 248,)	Hearing at
authorizing the replacement of the Jay Peak Tap)	Montpelier, Vermont
Transmission facility and the relocation of the existing)	July 14, 2010
46 kV transmission lines to the new facility in the Town)	
of Jay, Vermont)	

Order entered: 8/6/2010

PRESENT: Jay Dudley, Hearing Officer

APPEARANCES: Joslyn Wilschek, Esq.

Primmer Piper Eggleston & Cramer PC for Vermont Electric Cooperative, Inc.

Geoffrey Commons, Esq.

for Vermont Department of Public Service

Cielo Marie Mendoza, Esq. for Vermont Agency of Natural Resources

I. SUMMARY

This proceeding relates to a petition filed with the Public Service Board ("Board") by the Vermont Electric Cooperative, Inc. ("VEC") on March 5, 2010. VEC requests that the Board issue a certificate of public good, pursuant to 30 V.S.A. § 248(a)(2), to remove the existing Jay Peak Tap Transmission facility, to replace the existing facility with a new switching station facility located immediately to the southwest of the existing facility within a 132-foot by 150-foot fenced enclosure ("Jay Peak Switching Station"), and to relocate the existing 46 kV transmission lines to the new facility (together referred to as "the Project").

In this Proposal for Decision, I recommend that the Public Service Board approve the proposed Project and issue a CPG to the Petitioner authorizing construction of the Project, with conditions.

II. PROCEDURAL HISTORY

On March 5, 2010, VEC filed a petition with the Board requesting a certificate of public good under 30 V.S.A. § 248 to remove the existing Jay Peak Tap Transmission facility, to replace the existing facility with the Jay Peak Switching Station, and to relocate the existing 46 kV transmission lines to the new facility.

On March 18, 2010, Jean-Francois Bertrand and Fabienne Clement, adjoining landowners, filed a motion to intervene in this docket. A prehearing conference was held on April 8, 2010, and Mr. Bertrand and Ms. Clement appeared at the prehearing conference and withdrew their motion to intervene. Appearances were entered by: Joslyn L. Wilschek, Esq., Primmer Piper Eggleston & Cramer PC, for Vermont Electric Cooperative, Inc.; Geoffrey Commons, Esq., for the Vermont Department of Public Service ("Department"); and Cielo Marie Mendoza, Esq., for the Vermont Agency of Natural Resources ("ANR").

A tentative schedule for this proceeding was set forth in the Prehearing Conference Memorandum and Scheduling Order of April 9, 2010.

Following notice, a public hearing in Jay was held on June 8, 2010, which was attended by four members of the public, of whom one spoke. A site visit was made on the same date.

On July 1, 2010, VEC, the Department and ANR filed a memorandum of understanding ("MOU") in which all the parties agreed that the Board should issue a CPG authorizing the construction of the Project.

On July 7, 2010, the Department filed a letter stating that it found VEC's petition consistent with the *Vermont Electric Plan*, pursuant to 30 V.S.A. § 202(f).

Following VEC's waiver of notice, a technical hearing in this docket was held on July 14, 2010.

III. FINDINGS

Based on the entire record, including the petition, the prefiled testimony, the supplemental prefiled testimony, evidence presented at the technical hearing, the MOU, and other admitted exhibits, I conclude that this matter is ready for decision and report the following findings to the Board in accordance with 30 V.S.A. § 8.

Background and Project Description

- 1. VEC is a company as defined by 30 V.S.A. § 201 and holds a CPG issued under 30 V.S.A. § 231. Petition at 1.
- 2. VEC owns and operates the Jay Peak Tap Transmission facility ("Jay Peak Tap") in the Town of Jay and has offices located at 42 Wescom Road, Johnson, Vermont. Petition at 1.
- 3. The Jay Peak Tap was built in the 1950's and is located in the Town of Jay off Leavitt Circle, a Town road loop that accesses a small residential area, and approximately 125 feet south of Route 105. The existing facility is a pole-mounted structure with three manually operated airbreak switches. In 1990, Citizens Utilities, the previous owner, replaced the wood poles, but not the switches or conductors. The existing facility is used to isolate portions of the 46 kV system between Highgate and Newport for maintenance activity and hosts a 46 kV transmission line to Jay Peak Substation #40. Schuyler pf. at 4-5; Abendroth pf. at 3-4; exhs. VEC-SAS-2 and 4-5 and VEC-HRA-4; tr. 7/14/10 at 11 (Abendroth).
- 4. The existing air-break switches are more than fifty years old and can no longer be safely operated when energized. The manual operation of the switches require line crews be sent to the facility during outages, resulting in delays in outage recovery efforts for as many as 8,000 member-customers served by VEC. After a September 2006 lineworker accident at the Richford Substation, MPR Associates conducted a transmission system condition assessment, which identified the replacement of the Jay Peak Tap switches as a needed corrective action. In addition, the Transmission and Distribution portion of VEC's Integrated Resource Plan ("T&D IRP") specifically highlights the need to upgrade the switching equipment on the 46 kV transmission system, which includes the replacement of the existing Jay Peak Tap, and a Vermont Electric Power Company, Inc. ("VELCO") analysis confirmed that significant reactive

power support (through the installation of capacitor banks) was required in the Jay Peak area in order to maintain acceptable voltage performance. *Investigation into Vt. Elec. Coop., Inc.'s* 2008 Integrated Resource Plan, Docket 7449, Order of 7/31/09; Abendroth pf. at 3-4 and 11.

- 5. VEC, in response to the concerns above, will remove the existing Jay Peak Tap facility and replace it with a new switching station facility located on a three-acre parcel adjacent to the existing facility and will relocate the existing 46 kV transmission lines to the new facility. The Jay Peak Switching Station will be within an eight-foot high, 132-foot by 150-foot, fenced enclosure located approximately 300 feet west of Leavitt Circle and 125 feet south of Route 105. The fenced enclosure will be located to the south of the existing 115 kV VELCO line, to the west of the 46 kV line to Jay Peak, and approximately in-line with the existing 46 kV VEC line to Richford ("the Highgate-Newport line"). The one new power pole will be located approximately twenty to thirty feet outside of the fenced enclosure, southwest of the existing Jay Peak Tap. The Project will consist of the following physical structures and electrical components:
 - One new pole structure (forty-three feet above-ground);
 - Fence with gate on the northeast corner (132 feet by 150 feet, and eight feet high);
 - Gravel pad (extends approximately five feet beyond the perimeter of the fence line and is comprised of a fifteen-inch thick layer of crushed gravel and stone);
 - Access road (relocation of a small section of an existing access road and a vehicular access via the five-foot-wide gravel pad around the fence perimeter);
 - Control building for support equipment (fifteen feet by thirty feet and approximately ten to fourteen feet tall);
 - Four 2.7 MW MVAR capacitor banks;
 - Two steel a-frame structures (approximately forty-two feet above-ground to the top of the twelve-foot lightning masts);
 - Five dead tank, dry air insulated circuit breakers with vacuum interrupters, rated 72 kV, 1200 amperes;
 - Bypass switches to permit breaker maintenance without interrupting load;
 - Metering for the Jay Peak Substation load;
 - Remote control capability from the VEC Johnson System Operations Center, via the VELCO System Control and Data Acquisition System;
 - Security lights (four general area lights mounted on the fence to illuminate the site on an as-needed basis and one security light mounted on the control building that will be illuminated from dusk until dawn); and
 - Electric bus work.

In addition, VEC will install steel pedestal structures that will extend fifteen feet above the ground to support smaller components, such as the metering transformers mentioned above. Abendroth pf. at 5-7; Schuyler pf. at 4-5; Abendroth supp. pf. at 1; exhs. VEC-SAS- 4-5 and VEC-HRA-4-6; tr. 7/14/10 at 11-13 (Abendroth).

- 6. The Project will be located in, and adjacent to, an existing cleared utility right-of-way ("ROW"). Schuyler pf. at 4-5.
- 7. VEC will utilize the existing access road off of Leavitt Circle to access the Project. VEC will relocate part of the existing road on the north side of the fenced enclosure further north. Schuyler pf. at 17; tr. 7/14/10 at 11-13 (Abendroth).
 - 8. The Project's total estimated cost is \$2,392,474. Abendroth pf. at 7; exh. VEC-HRA-7.
- 9. Jay Peak Resort has informally agreed to contribute to the Project's costs, with an expected contribution of \$125,000. Abendroth pf. at 7; exh. VEC-HRA-7.
- 10. VEC has agreed to file updated substation plans after it finalizes the equipment configuration and to submit final lightning protection drawings. The Department will have one week to review the plans and drawings and request further Board action if needed. *See* MOU of 7/1/10 at 5-6.

The MOU

- 11. On July 1, 2010, VEC, the Department, and ANR (collectively, "the Parties") submitted an MOU, in which the parties agree that the Board should issue a CPG for the proposed Project. *See* MOU of 7/1/10.
- 12. The Parties agree the Project is consistent with the general good of the State of Vermont and will not have an adverse effect on Vermont ratepayers. *See* MOU of 7/1/10.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

13. The proposed project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of the affected municipality. This finding is supported by findings 14 through 21, below.

14. The Town of Jay Planning Commission and the Jay Selectboard issued letters in support of the Project waiving the advance notice requirements of 30 V.S.A. § 248(f) and stating that the Project will be consistent with the 2005 Jay Community Development Plan ("Jay Plan") and will enhance the orderly development of the region. Abendroth pf. at 9; exh. VEC-HRA-9 at 1-2.

- 15. The Northeastern Vermont Development Association ("NVDA") also issued a letter in support of the Project waiving the advance notice requirements of 30 V.S.A. § 248(f) stating that the Project will be consistent with the 2006 NVDA Regional Plan and will enhance the orderly development of the region. Abendroth pf. at 9; exh. VEC-HRA-9 at 3.
- 16. The Jay Plan acknowledges that VEC provides all of the populated or potentially populated areas of town with electricity. The Jay Plan also seeks to ensure "that the design of any structure or any land use will not create soil erosion, pollution, excessive run-off or other disturbance." Abendroth pf. at 9.
- 17. Chapter Two of the NVDA Regional Plan states as its goals to "[p]rovide an adequate, reliable, and secure energy supply to meet the region's needs," and "[l]imit the negative aesthetic impacts of power generation and distribution facilities." Abendroth pf. at 8.
- 18. The Project involves the replacement of an over fifty-year-old facility with a new switching station. The Project will be constructed west of the current facility and adjacent to the existing 46 kV transmission lines. Abendroth pf. at 8-9; exhs. VEC-HRA-2-4.
- 19. The Project site's grade is more than twenty feet below the grade of Route 105 and the Project will largely be screened from Route 105 and Leavitt Circle by existing, mature vegetation. The Project's gate and a portion of its fenced enclosure will be visible from Leavitt Circle. The Project will also be partially visible from Route 105 during the winter when the leaves are off the trees and shrubs, but motorists' views will be broken by the trees' trunks. Therefore, the Project's aesthetic impacts will not be undue. Abendroth pf. at 8; exh. VEC-HRA-2; Schuyler pf. at 5-6.
- 20. The Project will have minimal environmental impacts because it is not located near groundwater or surface water areas and VEC will use drainage and soil erosion controls during and after construction. Abendroth pf. at 9; Schuyler pf. at 8; exh. VEC-SAS-5.

21. The Project will improve the reliability of the region's existing electrical energy supply. Abendroth pf. at 8.

Need for Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

- 22. The proposed project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 23 through 25, below.
- 23. The existing Jay Peak Tap is over fifty years old and has serious reliability problems, which have resulted in delays in outage recovery efforts for customers served by VEC.

 Abendroth pf. at 9.
- 24. The existing facility is compromised of three air-break switches that can no longer be safely operated while energized and therefore must be manually operated, which requires crews to be sent to the location and delays in outage recovery efforts. The Project will resolve these reliability issues by replacing obsolete components. Abendroth pf. at 4 and 9-10; exhs. VEC-HRA-1 and 4-6.
- 25. Energy conservation measures, energy efficiency, load management and customerowned generation will not eliminate the need to replace the function of the Jay Peak Tap and since the facility is at the end of its useful life, there is no viable alternative to replacing it. Abendroth pf. at 9-10.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

- 26. The proposed project will not adversely affect system stability and reliability. This finding is supported by findings 27 through 30, below.
- 27. The Project will improve system stability and reliability for VEC by replacing an old facility, which no longer operates properly and has delayed recovery efforts during outage contingencies, with a modern transmission facility. Abendroth pf. at 4 and 10; exhs. VEC-HRA-1 and 4-6.

28. The Project will also enable transmission line voltage to be maintained within acceptable limits during peak load and contingency conditions. Abendroth pf. at 10.

- 29. The installation of circuit breakers (instead of replacing the old air-break switches with new air-break switches) will reduce the magnitude of service interruption resulting from a fault on one of the transmission lines. Abendroth pf. at 10.
- 30. The Project's completion will require an outage to relocate the existing 46 kV line serving the Jay Peak Substation to the new facility. Since the Jay Peak Substation primarily serves the Jay Peak Resort, the outage will be scheduled during the resort's off-season period (i.e., after fall foliage, but before the start of ski season). Abendroth pf. at 10.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

- 31. The proposed project will result in an economic benefit to the state and its residents. This finding is supported by finding 32, below.
- 32. The Project will improve reliability by providing the capability to maintain line voltage at an acceptable performance level during peak load and during emergency conditions and by reducing the magnitude of service interruptions due to faults on the transmission line serving the Jay Peak Substation. In addition, the installation of circuit breakers, instead of replacing the old air-break switches with new air-break switches, reduces the magnitude of service interruptions resulting from potential faults on one of the transmission lines. Abendroth pf. at 10.

Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment and Public Heath and Safety

[30 V.S.A. § 248(b)(5)]

33. The proposed project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, and public health and safety, subject to, and upon compliance with, the conditions set forth in the proposed order below. This finding is supported by findings 34 through 80 below, which give due consideration to the criteria specified in 10 V.S.A. § 1424a(d) and 10 V.S.A. §§ 6086(a)(1) through (8) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424a(d)]

34. The Project is not located on or nearby any waters of the state that have been designated as outstanding resource waters by the Water Resources Panel or the Natural Resources Board. Schuyler pf. at 12; exhs. VEC-SAS-3-4.

Water and Air Pollution

[10 V.S.A. §6086(a)(1)]

- 35. The Project will not result in undue water or air pollution. This finding is supported by findings 36 through 38, below.
- 36. The Project does not involve any activities that would create undue air pollution. The Project's operation will not produce any air pollution and dust control measures, such as wetting the ground surface or applying calcium chloride, will be utilized during construction. Schuyler pf. at 7.
- 37. The Project will not result in undue noise pollution. The closest residence is more than 600 feet away from the construction area and although the Project's construction may utilize excavation or drilling equipment, the noise from such equipment will not be greater than the noise typically associated with road construction activities. Schuyler pf. at 7.
- 38. The Project will not result in undue water pollution. The Project is designed to avoid adverse impacts on water quality and no paved surfaces will be installed on the Project site. Schuyler pf. at 7-8. *See* findings 39-66, below.

Headwaters

[10 V.S.A. \$6086(a)(1)(A)]

- 39. The Project will meet the applicable health and Department of Environmental Conservation ("DEC") regulations regarding the protection of groundwater and surface water quality. Schuyler pf. at 9. This finding is also supported by findings 40 through 42, below.
- 40. The Project is designed to minimize runoff and will obtain all applicable permits and employ appropriate soil erosion measures. Schuyler pf. at 9; *see* findings 38-66, herein.

41. The Project site is considered a headwaters area because it is an area of steep slopes above 1,500 feet elevation. Schuyler pf. at 9.

42. No groundwater or surface water supply protection areas are located in the vicinity of the Project. Schuyler pf. at 9; exh. VEC-SAS-5.

Waste Disposal

[10 V.S.A. §6086(a)(1)(B)]

- 43. The Project will meet any applicable health or DEC regulations regarding the disposal of wastes and will not involve the injection of wastes or toxic substances into ground waters. This finding is supported by findings 44 through 48, below.
- 44. VEC will meet the DEC's disposal of construction debris regulations. Schuyler pf. at 10.
- 45. During construction, the Project will utilize a licensed hauler for the waste disposal of incidental trash to a permitted solid waste management facility. VEC will remove one power pole from the existing Jay Peak Tap structure and will take it to VEC's pole yard in Johnson for re-use. VEC will recycle the waste metal and porcelain components from the existing Jay Peak Tap structure. None of the equipment that will be removed from the existing Jay Peak Tap contains PCBs, hazardous substances, asbestos, or lead-based paint. Schuyler pf. at 10 and 17.
- 46. Trees and brush removed during the Project's construction will be chipped and spread on-site or taken to an approved disposal facility. Schuyler pf. at 10.
- 47. During operation, VEC employees will take any project-related incidental trash to VEC's Derby Warehouse and then utilize a commercial hauler for waste disposal. Schuyler pf. at 17.
- 48. VEC will not store fuels or hazardous materials on-site and will not install oil-containing equipment on the Project site. Therefore, the Project will not result in the infiltration of hazardous constituents into groundwater. Schuyler pf. at 9.

Water Conservation

[10 V.S.A. §6086(a)(1)(C)]

49. The Project will not consume water. Schuyler pf. at 11.

Floodways

[10 V.S.A. \$6086(a)(1)(D)]

50. The Project is not located within a floodway or floodway fringe. Schuyler pf. at 11.

Streams

[10 V.S.A. $\S6086(a)(1)(E)$]

51. The Project will not have an undue adverse impact on streams. A perennial stream, South Crook Brook, is located approximately 250 feet down slope from the southern Project boundary. No natural streams or defined water channels connect the Project area to the stream below. No stream crossings will be required for the Project and the Project will provide erosion control during construction. Schuyler pf. at 12; exh. VEC-HRA-3.

Shorelines

[10 V.S.A. §6086(a)(1)(F)]

52. The Project does not involve the development of any shorelines. Schuyler pf. at 12.

Wetlands

$[10 \text{ V.S.A. } \S 6086(a)(1)(G)]$

- 53. The Project will not have an undue adverse impact on wetlands. This finding is supported by findings 54 through 59, below.
- 54. The Project site is not in or adjacent to any Class I or Class II wetlands deemed significant wetlands by the State of Vermont. The National Wetland Inventory maps do not show any wetlands within the Project site. Schuyler pf. at 13.
- 55. In April, VEC conducted a wetland delineation on the Project site. The wetland delineation identified a Class III wetland within the Project's proposed construction area. Approximately one-half acre of the Class III wetlands will be affected by the Project's construction. Schuyler supp. pf. at 2-3; exh. VEC-SAS-8.
- 56. The Project requires more than 3,000 square feet of fill and classifies as a Category 2 project under the U.S. Army Corps of Engineers' ("USACE") Vermont Programmatic General

Permit ("VTGP"). Accordingly, VEC will secure coverage for the Project under the VTGP by submitting a written application to the USACE. Schuyler supp. pf. at 3; exh. VEC-SAS-8.

- 57. At ANR's request, VEC agreed to describe and map the hydrology in the Project area, including the wetlands impacts and all surrounding streams and water channels and submit the final Wetlands Impact Map to ANR and submit the description and map with the requisite VTGP application. Exh. MOU of 7/1/10 at 16.
- 58. The Project will not require a Conditional Use Determination ("CUD"). Schuyler supp. pf. at 3.
- 59. VEC will secure all necessary permits prior to construction and will take appropriate steps to avoid or minimize impacts to wetlands. Schuyler pf. at 13.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §6086(a)(2) and (3)]

60. The Project will not require a water supply. Schuyler pf. at 14.

Discussion

VEC stated that it will mitigate air pollution during construction through the use of dust control measures, such as wetting the ground surface or applying calcium chloride.¹ To the extent VEC uses water for dust control, VEC must truck in water from an appropriate off-site source.

Soil Erosion

[10 V.S.A. §6086(a)(4)]

- 61. The Project will not cause unreasonable soil erosion or cause a reduction in the capacity of the land to hold water so that a dangerous situation results. This finding is supported by findings 62 through 66, below.
- 62. The Project area slopes from Route 105 on the north to the Sand Crook Brook on the south. The Project's construction requires cut and fill to make a flat area for the switching station and has the potential to cause soil erosion and/or to alter the runoff characteristics of the site. Schuyler pf. at 12 and 14; exh. VEC-SAS-3.

^{1.} Schuyler pf. at 7.

63. The Project is designed to prevent soil erosion. VEC will construct a gravel and stone pad that will retain water and allow for some infiltration to minimize runoff and control erosion. In addition, the Project will also employ a trench to collect surface run-off from the slope north of the switching station, which drains via a stormdrain that daylights to the east of the switching station and is more than 300 feet from the nearest surface water. The trench system will slow the overland flow across the Project site and serves to minimize erosion and protect the water quality of the stream located 250 feet down slope from the Project. In addition, prior to construction, VEC will install silt fences at the edges of the work area and around any soil stockpiles. As soon as possible after construction, VEC will spread stockpiled topsoil over disturbed areas and then seed and mulch the disturbed areas to encourage good vegetative cover. Schuyler pf. at 14-16.

- 64. During construction, the Project will require coverage under the Vermont Construction General Permit 3-9020 for Stormwater Discharges Associated with Construction Activities because the Project's construction disturbance will be more than one acre. The Project is categorized as Low Risk. Schuyler pf. at 8; exh. VEC-SAS-3.
- 65. VEC will employ erosion control measures consistent with the *Vermont Low Risk Site Handbook for Erosion Prevention and Sediment Control* ("Low Risk Handbook") and will monitor erosion control measures during and after construction until the soils at the Project site are stabilized. Schuyler pf. at 8 and 15-16.
- 66. During operation, the Project will not require coverage under the Vermont Stormwater Discharges General Permit 3-9015 because the Project's total impervious area will be less than one acre. Schuyler pf. at 8 and 16.

Transportation Systems

[10 V.S.A. §6086(a)(5)]

- 67. The Project will not have a significant impact on traffic. The Project will not have long-term traffic impacts, but will have some short-term traffic impacts during the three to four months of construction activity involving work crews of six to ten people. Schuyler pf. at 16.
- 68. The Project will be accessed using an existing driveway off of Leavitt Circle, a Town Road. Schuyler pf. at 17.

Educational and Municipal Services

[10 V.S.A. §6086(a)(6)]

69. The proposed project will not have any impact on educational services. Schuyler pf. at 17.

Municipal Services

[10 V.S.A. §6086(a)(7)]

70. The Project will have minimal impacts on municipal services. The Project may require fire or rescue services, if an emergency occurs at the Project site. Schuyler pf. at 17.

Aesthetics, Historic Sites and Rare and Irreplaceable Natural Areas

[10 V.S.A. §6086(a)(8)]

- 71. The proposed project will not have an undue adverse effect on aesthetics or on the scenic or natural beauty of the area, subject to, and upon compliance with, the conditions set forth in the proposed order below. This finding is supported by findings 72 through 78, below.
- 72. The existing Jay Peak Tap facility is located off of Leavitt Circle in Jay, Vermont and consists of three air breakers that are mounted on a single-pole structure. Schuyler pf. at 4-5; Abendroth pf. at 4; exhs. VEC-SAS-2 and 4-5 and VEC-HRA-4.
- 73. The new Jay Peak Switching Station will be within an eight-foot high, 132-foot by 150-foot, fenced enclosure located approximately 300 feet west of Leavitt Circle and 125 feet south of Route 105. The fenced enclosure will be located to the south of the existing 115 kV VELCO line, to the west of the 46 kV line to Jay Peak, and approximately in-line with the existing 46 kV VEC line to Richford ("the Highgate-Newport line"). The new substation structures will be approximately forty-two feet high (above-ground) at the highest point, including the twelve-foot high lighting masts, and will be lower than the existing 115 kV VELCO line, which is seventy-five feet high (above-ground). The one new power pole will be located approximately twenty to thirty feet outside of the fenced enclosure, southwest of the existing Jay Peak Tap. The new pole will be approximately forty-three feet tall (above-ground), the same height as the existing poles for the VEC 46 kV line. Schuyler pf. at 4-5; Abendroth pf. at 6-7; Abendroth supp. pf. at 1; exhs. VEC-SAS- 4-5 and VEC-HRA-4-5; tr. 7/14/10 at 11-12 (Abendroth).

74. Clearing will be minimal because the Project will be located in, and adjacent to, an existing cleared utility ROW. Schuyler pf. at 4-5; tr. 7/14/10 at 10-11 (Abendroth).

- 75. Currently, viewers from Leavitt Circle looking west along the cleared ROW and viewers from Route 105 looking south during the winter, can see the pole structures and overhead transmission and distributions lines for the existing 115 kV VELCO line, 46 kV Jay Peak line, and 46 kV Highgate-Newport line. After construction, the Project's gate and a portion of its fenced enclosure will be visible from Leavitt Circle, but the Jay Peak line and structures will no longer be visible because they will be moved south. After construction, the Project will also be partially visible from Route 105, when the leaves are off the trees and shrubs, but the view will be broken by the trees' trunks and diminished by the location of the Project more than twenty feet below the grade of the road. During the months when trees and shrubs have their leaves, the Project will be largely screened from both Leavitt Circle and Route 105 by the existing mature vegetation and only the top half of the Project's structures will be visible from Route 105.

 Abendroth pf. at 8; exh. VEC-HRA-2; Schuyler pf. at 5-6.
- 76. The Project will include identification and safety signs on the fence, four general area lights mounted on the fence to illuminate the site on an as-needed basis for night maintenance or inspection, and one security light mounted on the control building, which will be shielded so the light is directed into the fenced area; will not be visible more than a few feet from the fence; and will be illuminated from dusk until dawn. Schuyler pf. at 5-6.
 - 77. The Project will not have an undue adverse aesthetic impact. Schuyler pf. at 6.
- 78. There are no historic sites, archeologically sensitive areas, or rare and irreplaceable natural areas in the vicinity of the proposed project. Schuyler pf. at 7 and 18; exh. VEC-SAS-7. <u>Discussion</u>

Based on the above findings, I find that the proposed project will not have an undue adverse effect on the aesthetics or scenic and natural beauty of the area. In reaching this conclusion, I rely on the Environmental Board's methodology for determination of "undue" adverse effects on aesthetics and scenic and natural beauty as outlined in the so-called *Quechee Lakes* decision. *Quechee Lakes Corporation*, 3W0411-EB and 3W0439-EB, dated January 13, 1986.

As required by this decision, it is first appropriate to determine if the impact of the project will be adverse. The project would have an adverse impact on the aesthetics of the area if its design is out of context or not in harmony with the area in which it is located. If it is found that the impact would be adverse, it is then necessary to determine that such an impact would be "undue." Such a finding would be required if the project violates a clear written community standard intended to preserve the aesthetics or scenic beauty of the area, if it would offend the sensibilities of the average person, or if generally available mitigating steps would not be taken to improve the harmony of the project with its surroundings. The Board's assessment of whether a particular project will have an "undue" adverse effect based on these standards should be significantly informed by the overall societal benefits of the project.

As noted above, the new facility will be more visible from Route 105 than the existing transmission structures at the site and will therefore likely have an adverse impact on the area's aesthetics. However, I conclude that any potentially adverse aesthetic impacts of the Project will not be undue. First, the Project does not conflict with a clear, written community standard. Both the Town of Jay Planning Commission and the NVDA issued letters in support of the Project, which stated that the Project is consistent with the Jay Plan and the NVDA Regional Plan.² Second, VEC took several steps to mitigate the aesthetic impacts of the Project including, replacing an existing facility within and adjacent to an existing utility ROW, adjusting the Project's siting to avoid negative aesthetic impacts on the nearest residence,³ retaining mature vegetation that largely screens the Project site from the two nearby roadways, and utilizing lighting that avoids light pollution. Lastly, any negative aesthetic impacts of the Project will not be shocking or offensive when viewed within the context of the Project-location's current condition, which includes transmission structures and overhead transmission lines that have been in place for more than fifty years. For these reasons, I conclude that any potentially adverse aesthetic impacts of the Project will not be undue.

^{2.} See Findings 15-16.

^{3.} Tr. 7/14/10 at 15-16 (Abendroth).

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. §6086(a)(8)(A)]

79. The Project location does not include any rare or endangered species or any critical fish or wildlife habitat. Schuyler pf. at 18.

Development Affecting Public Investments

[$10 \text{ V.S.A. } \S 6086(a)(9)(K)$]

80. The Project will not have an adverse impact on public facilities. Schuyler pf. at 18.

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

81. The Project will not have any adverse effects on the health, safety, or welfare of the public and will not unnecessarily or unreasonably endanger the public or adjoining landowners. The Project will be designed in accordance with the National Electric Safety Code requirements, will use high-quality materials and will adhere to prudent utility construction practices throughout the construction phase. Abendroth pf. at 12-13.

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

82. The Project complies with VEC's IRP. The Board approved the T&D IRP on July 31, 2009. The T&D IRP prioritized capital projects that would focus first on the safety and operability of VEC's system. Specifically, the T&D IRP highlighted the need to upgrade the switching equipment on the 46 kV transmission system, which includes the replacement of the existing Jay Peak Tap. *Investigation into Vt. Elec. Coop., Inc.'s 2008 Integrated Resource Plan*, Docket 7449, Order of 7/31/09; Abendroth pf. at 11.

Compliance with Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

83. The Project is consistent with the Department's 2005 *Vermont Electric Plan*. The new switching station will increase safety and reliability by replacing three manually-operated airbreak switches with a new, modern switching station. The Project will improve the recovery period from outages and prevent further outages. Abendroth pf. at 4 and 10-11.

84. On July 7, 2010, the Department filed a letter stating that it found VEC's petition to be consistent with the *Vermont Electric Plan*, pursuant to 30 V.S.A. § 202(f), provided that VEC's actions are consistent with the Petition and testimony filed in the docket. Letter from Geoffrey Commons, Esq., to Joslyn Wilschek, Esq., for VEC, filed July 7, 2010.

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

85. The Project is not located on or near any designated outstanding resource waters. Schuyler pf. at 12.

Existing or Planned Transmission Facilities

[30 V.S.A. § 248(b)(10)]

86. The Project will have a positive effect on existing or planned transmission facilities by improving transmission line voltage and improving the capability to clear and isolate faults on the transmission system. Implementation of the Project eliminates existing adverse effects on Vermont utilities and customers, specifically, low line voltage during peak loads or continency conditions. Abendroth pf. at 4 and 12.

IV. Conclusion

Based upon all the above evidence, and with the conditions I recommend the Board include as part of the approval of the Project, I conclude that the Project:

(a) will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, and the recommendations of the municipal legislative bodies;

(b) is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and land management measures;

- (c) will not adversely affect system stability and reliability;
- (d) will result in an economic benefit to the state and its residents;
- (e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) and §§ 6086(a)(1) through (8) and (9)(K);
 - (f) is consistent with the principles of least-cost integrated resource planning;
- (g) is in compliance with the electric energy plan approved by the Department under § 202 of Title 30 V.S.A.;
- (h) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Water Resources Board;
 - (i) does not involve a waste-to-energy facility; and
- (j) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

Pursuant to the MOU between all parties to this proceeding, the Parties have waived their rights under 3 V.S.A. § 811 to file written comments or present oral argument with respect to this proposal for decision, provided that this proposal for decision is substantially in the form as that agreed to by the Parties. Because this proposal for decision is substantially in the agreed-upon form, it has not been circulated to the parties.

Dated at Montpelier, Vermont, this 4th day of August, 2010.

s/ Jay Dudley
Jay Dudley
Hearing Officer

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Public Service Board of the State of Vermont that:

- 1. The findings, conclusions and recommendations of the Hearing Officer are adopted.
- 2. The project as proposed, in accordance with the evidence and plans submitted in this proceeding, and as conditioned by this Order, will promote the public good of the State of Vermont in accordance with 30 V.S.A. § 248.
- 3. Prior to proceeding with construction, Vermont Electric Cooperative, Inc. ("VEC") shall obtain all necessary permits and approvals. Construction, operation, and maintenance of the proposed Project shall be in accordance with such permits and approvals, and with all other applicable regulations, including those of the Vermont Agency of Natural Resources and the U.S. Army Corps of Engineers.
- 4. VEC shall truck water in from an appropriate off-site source for any dust control measures.

Dated at Montpelier, Vermont,	this 6 th	_ day of _	August	, 2010.
s/ Jame	s Volz)	
)	PUBLIC SERVICE
s/ David	d C. Coen))	Board
s/ John	D. Burke)	OF VERMONT

OFFICE OF THE CLERK

FILED: August 6, 2010

ATTEST: s/ Susan M. Hudson

Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.